

# WASTEWATER PUMPS



# **ROTΛΜΛC**

## WASTEWATER PUMPS TECHNOLOGY

Wherever people live or work, wastewater is produced, and reliable systems must be in place to ensure it is removed and cleaned. Only then can it be returned to the natural water cycle.

With its wastewater pumps, ROTAMAC is perfectly positioned to serve wastewater works.

Wastewater pumps from ROTAMAC are expertly designed for the fluid handled and the application. High-quality components ensure flawless operation at all times – even under conditions as tough as those found in industrial wastewater applications.

In addition, decades of experience and extensive application knowledge make ROTAMAC the ideal partner for system optimization, while the company's leading role in research and development ensures the high quality of ROTAMAC products and services. This enables you to operate your wastewater system reliably, with minimal maintenance and low life cycle costs. Comprehensive advice and excellent worldwide service round off ROTAMAC's portfolio.

Thanks to decades of experience on the market, ROTAMAC offers comprehensive application knowledge – even for large-scale projects. You can benefit from application and service specialists on hand to provide support throughout the entire life cycle of your system.





#### Self-Priming Pumps

The large volute design allows solid handling, automatic repriming without the need for suction or discharge check valves. The impeller, seal, wear plate and flap valve can all be accessed through the coverplate opening for inspection or service. Easy to maintain, all in just a few minutes' time.

#### MATERIALS

Wetted parts: Cast iron, ductile iron, 304/316/ duplex stainless steel, hastelloy C276 Shaft Seal: Single mechanical seal

#### **SPECIFICATIONS**

Flow to: 1250 m3/h Head to: 62 m Pressure to: 8 bar Temperature to: 70°C

Chemical Process Pumps [ ASME B73.1 ], Open Impeller

This versatile pump line is offered in a wide range of constructive materials that allow the pump to work with many different kinds of fluids, from corrosive and non-corrosive liquids ranging from water to hydrocarbons or slurries. These pumps are required to meet the ANSI / ASME B73.1

#### MATERIALS

Wetted parts: Carbon steel, stainless steel, alloy 20, hastelloy C, monel, nickel, titanium Shaft Seal: Mechanical seal, packing, dynamic

#### **SPECIFICATIONS**

Flow to: 1260 m3/h Head to: 200 m Pressure to: Class 300 Temperature to: 260°C



#### Submersible Pumps

Powerful submersible pumps for handing sewage water, suitable for handling solids in both municipal & industrial wastewater applications. Easy to install as it requires few accessories, low noise operation, reduced energy consumption and low maintenance cost.

#### MATERIALS

Wetted parts: Cast iron Shaft Seal: Double mechanical seal

#### SPECIFICATIONS

Flow to: 1800 m3/h Head to: 60 m Pressure to: 8 bar Temperature to: 40°C



#### Vertical Sump Pumps

These pumps are intended for use in the industrial pumping applications to pump clean or lightly contaminated liquids, fibrous slurries and liquids containing solids from the deep sumps. The pumping head is suspended into the pumped liquids and the drive motor is dry installed on the top.

#### MATERIALS

Wetted parts: Cast iron, ductile iron, cast steel, 304/316/duplex stainless steel Shaft Seal: Packing seal, lip seal

#### **SPECIFICATIONS**

Flow to: 300 m3/h Head to: 100 m Pressure to: 12 bar Temperature to: 120°C

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#### Semi-Open Impeller Wear Resistance Pumps

These are end suction heavy-duty pumps, semi-open extra thick impeller with front wear plate, built to stand up to the toughest services, while providing maximum reliability and extreme ease of maintenance.

#### MATERIALS

Wetted parts: Cast iron, ductile iron, 304/304L/ 316/316L/904L/duplex stainless steel Shaft Seal: Single or double mechanical seal

#### **SPECIFICATIONS**

Flow to: 1350 m3/h Head to: 105 m Pressure to: 16 bar Temperature to: 150°C



#### **Torque Flow Pumps**

The torque flow pump is also referred to as vortex flow pump. Typical liquids to be pumped by torque flow pumps are waste water, cooling agents contaminated with metal chips, abrasive oils and lyes, lime milk and also products that have to be transported with care.

### MATERIALS Wetted parts: Cast iron, 304/316 stainless steel, ASTM A532 Class III Shaft Seal: Mechanical seal, packing, dynamic

### **SPECIFICATIONS**

Flow to: 1500 m3/h Head to: 100 m Pressure to: 16 bar Temperature to: 90°C



#### **Slurry Pumps**

MATERIALS

The heavy duty slurry pump range is designed to perform continuous pumping of highly abrasive/dense slurries in minerals processing plants as well as other industrial applications such as sugar processing, wet scrubber processing, sludge recirculation, etc.

Wetted parts: ASTM A532, CR29, rubber,
synthetic rubber, polyurethane
Shaft Seal: Mechanical seal, packing, dynamic

#### **SPECIFICATIONS**

Flow to: 5400 m3/h Head to: 125 m Pressure to: 16 bar Temperature to: 100°C



#### Vertical Slurry Pumps

The heavy duty cantilever sump pumps are designed for applications requiring greater reliability and durability than conventional vertical process pumps can offer. Fully elastomer lined or hard metal fitted.

#### MATERIALS

Wetted parts: ASTM A532, CR29, rubber, synthetic rubber, Shaft Seal: None

#### SPECIFICATIONS

Flow to: 1440 m3/h Head to: 34 m Pressure to: 4 bar Temperature to: 100°C

## Wastewater Pumps

#### ISO 5199 Process Pumps , Open / Non-Clog / Vortex Impeller

There are used as process pumps in many different areas of process applications. The wide range of impeller selection enable to pump suspensions at solids of up to 8%, offer high efficiencies of up to 90%, with their advantages of low maintenance cost and common parts design.

#### MATERIALS

Wetted parts: Cast iron, carbon steel, chrome iron, 304/316/duplex stainless steel Shaft Seal: Mechanical seal, packing, dynamic

### SPECIFICATIONS

Flow to: 700 m3/h Head to: 160 m Pressure to: 25 bar Temperature to: 180°C



#### Sewage Pumps

These series pumps are used for pumping liquids, rain, raw and mixed water with suspended solids, muddy water, sewage water, other solid – liquid mixtures. The pumps are available either as horizontal or vertical dry well units. Vertical pumps are offered with direct motor mounted or cardan shaft options.

#### MATERIALS

Wetted parts: Cast iron, ductile iron, cast steel, 316 stainless steel Shaft Seal: Packing seal

#### SPECIFICATIONS

Flow to: 4000 m3/h Head to: 100 m Pressure to: 16 bar Temperature to: 95°C

Non-Metallic Horizontal Centrifugal Pumps [ ISO5199 / ISO2858 ]

They comply with DIN EN 22858, ISO 2858 and ISO 5199. Handling of aggressive liquids in the chemical and petrochemical industries. Additionally the armoured pump casing absorbs the external forces acting on the pump.

#### MATERIALS

Wetted parts: PP, GFRPP, PVDF Shaft Seal: Mechanical seal

#### SPECIFICATIONS

Flow to: 500 m3/h Head to: 120 m Pressure to: 12 bar Temperature to: 120°C



Non-Metallic Vertical Sump Pumps

They can be classified as vertically suspended, single-casing, volute, line-shaft driven sump pumps. All parts in contact with the liquid are made of strong solid plastic, the heavily constructed shaft has been given a nonporous plastic coating. Handling of aggressive liquids, contaminated liquids such as acids and alkalis.

#### MATERIALS

Wetted parts: PP, PVDF Shaft Seal: Lip seal, labyrinth seal

#### **SPECIFICATIONS**

Flow to: 1000 m3/h Head to: 70 m Pressure to: 10 bar Temperature to: 120°C

# **ROTAMAC**

- Standardized End Suction Pumps • EN733/DIN24255, ISO2858/ISO5199 ASME B73.1, API610
- Split Casing Double Suction Pumps
- Solid Handling Pumps • Slurry/Vortex/Semi-open/Open/Non clog
- High Pressure Multi-Stage Pumps
- Self-Priming Pumps •
- Submersible Pumps
- **Close Coupled Pumps** 0
- Vertical Multi-Stage / Immersible Pumps
- Vertical Sump Pumps
- Vertical Turbine Pumps
- Mixed / Axial Flow Pumps
- Liquid Ring Vacuum Pumps Ö
- Chemical Process Plastic Pumps
- Fire Fighting Pump Packages (NFPA20) •
- Booster Pump Packages
- Trailer Mounted Pumps

ROTAMAC can help relieve the stresses and reduce the life cycle costs associated with the most important aspects of plant operation.

Dedicated to delivering the highest quality support, ROTAMAC services and solutions integrates hydraulic, mechanical and materials engineering knowledge with creative solutions to improve equipment reliability and system performance, reduce energy consumption and improve the safety and environmental impact of operations.

#### Pump Services and Repair



Inspection

Testina

#### **Capabilities** Overview

Design

- Equipment Selection and Optimization
- Material Selection
- System Design
- System Optimization

#### Start-up

- Equipment Installation
- Laser Alignment
- Commissioning and Running test
- Operator Training
- On-site Project Supervision
- On-site Troubleshooting

#### Operation and Maintenance

- Equipment Inspection •
- Repair & Overhaul
- Advanced Diagnostics
- Service Maintenance Contracts

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